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PARENTAL LEAVE IN SWEDEN: THE EFFECTS OF THE SECOND DADDY MONTH

by

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Parental Leave in Sweden: The Effects of the Second Daddy Month^{*}

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Abstract

In 2002 the number of months reserved for fathers in the Swedish parental leave system increased from one to two. This coincided with an increase of total time of parental leave from 12 to 13 months. The results are obtained using a natural experiment approach, comparing the behavior of parents to children born immediately before and after the reform. Both fathers and mothers increased their use of parental leave after the reform. The increase for fathers was caused by a shift of fathers using about one month of parental leave to about two months. The increase was smaller than after the introduction of the first daddy month. From this we can conclude that fixed costs for taking parental leave are not important for fathers and that the marginal utility of parental leave is not increasing in total parental leave.

JEL Classification: J13, J16, J22, J48

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1. Introduction

Parental leave is primarily used by women. However, a number of countries have recently introduced reforms to increase fathers' use of parental leave, and in many other countries such reforms are under discussion. Sweden was one of the first countries to earmark part of the parental leave for fathers. One "daddy month" was introduced in 1995 and a second daddy month followed in 2002. The effects of the first daddy month are studied in Ekberg et al (2005). The present paper studies the effect of the second daddy month.

When the first daddy month was introduced the total length of parental leave was unchanged. The introduction of the first daddy month lead to a redistribution of parental leave from mothers to fathers. The introduction of the second daddy month coincided with an increase in the parental leave benefit period from 12 to 13 months.

The reasons for studying the second daddy month are of two types. The first set of reason is the same as for studying the first daddy month; does the reform achieve its ends of increasing the participation of fathers in child care. Parental leave can be taken until the child is eight years old, or finishes first grade in school. The full effect of the introduction of the second daddy month can thus not be evaluated before 2010. However, most of the parental leave is taken during the first two years after the child is born. The aims of the reform are to give the child an early close contact with the father, and to facilitate a more equal sharing of responsibility for child care and house work between men and women. To realize these goals it is important that the fathers take parental leave when the child is relatively young. The introduction of the first daddy month did lead to a substantial increase in fathers' parental leave. One reason for concerns was however that a substantial fraction of the fathers' increase took place when the child was over two years old and when to a large extent over summers and public holidays. This was not the intention of the reform makers. With the data used in this paper, it is possible to investigate to what extent fathers increase their use of parental leave during the first 18 month of the child's life, which gives an important indication to what extent the reform makes fathers behave in the intended way.

The second set of reason to study the second daddy month is related to the different properties of the two reforms. The second daddy month was an increase of total parental leave, not a redistribution from mothers to fathers. A second difference is simply that the second daddy

month leads to longer total parental leave for fathers than the first daddy month. If the demand for parental leave by fathers is decreasing in total length of parental leave, i.e. that the marginal utility in parental leave is decreasing in total parental leave we would expect a smaller effect of the second daddy month, than of the first. On the other hand, if there is a fixed cost of taking parental leave, one may expect a larger effect of the second daddy month than of the first. Some fathers may be willing to forfeit one daddy month, but not two.

From a methodological point of view, the daddy month reforms also provide an interesting example of a situation where a "'natural' natural experiment"¹ is provided by the design of the reform. Parents of children born immediately after the reform are treated differently than parents of children born immediately before the reform, and the exact birth date is the outcome of a natural random process.

The reminder of the paper is organized as follows. Section 2 gives an overview of the Swedish parental leave system. Section 3 examines the decision problem of the parents. Section 4 describes the data and Section 5 motivates why the data are suitable for using a natural experiments approach. Section 6 reports the results and Section 7 concludes.

2. The Swedish parental leave system

After the introduction of the second daddy month, parents in Sweden are entitled to 13 months of parental leave benefits, based on previous earnings. The reimbursement level is 80 percent of current earnings. To be eligible for the earnings-based parental leave benefits, the parent has to participate in the labor force during the previous eight months. Otherwise the parent obtains a minimum amount of SEK 150 per day (about \$20). The 13 months of parental leave may be distributed over the period until the child turns eight, or finishes first grade in school, but most parental leave are use before the child turns two. The parents can divide the leave in whichever way they want, with the restriction that two months of parental leave are reserved for each parent. In practice this restriction is binding almost only for fathers, as almost all mothers took at least two months of parental leave. Further, the fathers are eligible for ten days of leave in connection to the birth of the child. This benefit may be used even if the mother is on parental leave at the same time. Most fathers use these ten days, and therefore there are register data on the income and age for most fathers.

¹ See Rosenzweig and Wolpin (2000) for a discussion on 'natural' natural experiments.

In 1974 the previous maternity leave system were changed to a parental leave system, where both parents were allowed to take parental leave. The share of fathers taking parental leave was very low the first years after the introduction of parental leave. It slowly increased during the seventies and eighties, but was still only about ten percent at the end of the eighties. The length of paid parental leave was gradually increased from six months in 1974 to 15 months in 1989. However, the last three months were only reimbursed at a low flat rate of 60 SEK (about 8 USD), while the other twelve months were reimbursed at a rate of 90 percent of previous earnings.

The uneven distribution of parental leave between fathers and mothers lead to the introduction of a so called daddy-month in 1995. This meant that one month of the twelve months which are reimbursed in relation to previous earnings was reserved for each parent. This restriction was in practice binding almost only for fathers, thus the name "daddy-month". The reasons for the reform were to increase gender equality in the labor market, increase gender equality in child care and household work, and to facilitate an early and close contact between the father and the child. For a more detailed discussion of the public discussion about first the daddy-month see Ekberg et al. (2005).

It was not until the end of the nineties that fathers' parental leave again started to increase to any large extent. This may seem surprising since the daddy month, introduced in 1995 provided strong incentives for the father to take at least one month of parental leave. However, it take time for the reform to reach full effect, since parental leave can be used until the child turns eight, or finishes first grade in school. The full effects of the reform thus take eight years to materialize.

3. The decision problem of the parents

It is useful to distinguish between families where the fathers take no or only little parental leave, families where the father take the reserved number of days of parental leave, and families where the father take more than the reserved number of days. For the days of parental leave reserved for the father the decision is simply to take or not to take the parental leave days. If the father takes more than the reserved days of parental leave the number of possible

parental leave benefit days for the mother will fall.² When the couple put a low value on parental leave of the father, he will take none or only a few days of parental leave. For a medium value he will take the reserved days, and for a high value he will take more than the reserved number of days.

Consider a couple where both the mother and the father would take six months of parental leave if the total time of parental leave is twelve months. After the introduction of the second daddy month they have 13 months of parental leave to share. The restriction that two months is reserved for each couple is not binding, so the reform simply means that the total time the parents are eligible for parental leave increase by one month. For this type of couples we would expect that some part of the increase goes to the father and some part goes to the mother.

Second, there are couples where the fathers take no or only very little parental leave. There are two possible reasons for this. The father does not qualify for the parental leave benefits, or the father chose not to take any parental leave. Obviously, the second daddy month will not have any effect on fathers' use of parental leave in the first case. The analysis of the case where the father would chose not take any parental leave before the reform is more interesting. In some cases there may be fixed costs of taking parental leave, for example if the parents employer have a fixed cost of hiring a substitute worker during the parental leave. Some fathers may be willing to forgo one month of parental leave to avoid the fixed cost, but not two. If so, the reform will increase the use of parental leave for these fathers.

Let us also consider the case where there are no fixed costs of parental leave. If the marginal utility of parental leave is a decreasing function of total parental leave, fathers who would prefer not to use the first daddy month would be even less interested in a second daddy month. If these assumptions hold, the second daddy month would not affect the fathers who would not use the first daddy month. However, it is conceivable that the marginal utility of parental leave is increasing in total time of parental leave, at least in some intervals. If the parent becomes better at child care over time, the second month may be less demanding than the first. If so, it is at least theoretically possible that some fathers who would not use the first daddy

 $^{^{2}}$ The same rules apply for mothers and fathers, but since almost all mothers take at least two months of parental leave the analysis only discuss the case when the restriction is binding for fathers. The analysis is the same in the

month will take some parental leave as a result of the reform, even in the absence of fixed costs for taking parental leave. To sum up, it is possible, but not necessary, that the second daddy month increase the use of parental leave in the group of fathers who without reform would have taken no parental leave.

The third case is when the father takes the reserved parental leave, but nothing more. Fathers who without the reform would have taken the single daddy month that was in place before the reform now have the option of taking two months of parental leave, without reducing the parental leave of the mother. The introduction of the first daddy month lead to a very large increase in the share of fathers taking one month of parental leave. If a large share of the couples remains willing to let the father take the reserved parental leave days, but nothing more, there will be a large increase in the share of fathers taking the share of fathers taking two months of parental leave days for parental leave after the introduction of the second daddy month. There will also be a decrease in the share of fathers taking one month of parental leave in the share of fathers taking one month of parental leave before the share of fathers taking one month.

To sum up the expected consequences of the introduction of second daddy month, we expect an increase of fathers taking two months of parental leave. We also expect a decrease in the share of fathers taking about one month of parental leave. We expect no change in the share of fathers taking more than two months of parental leave, but expect an increase in average number of parental leave days for both fathers and mothers in that group. Finally, it is possible, but not certain, that that we will see a decrease in the share of fathers taking zero days of parental leave.

Parents are allowed to use the parental leave benefits until the child turns eight. The data available in the paper covers 17 months, for a data set covering all parents in Sweden, and 24 months for a smaller data set. This means that we will only observe a part of the effects of the reform.³ For example: a father who take half of the reserved parental leave during the time we

few cases where the binding restriction is on mothers parental leave.

³ We know that most of the parental leave is used during the two first years of the life of the child, but we also know that a large share of the increase in fathers' use of parental leave after the introduction of the first daddy month occurred when the child was between two and eight years old, see Ekberg et al (2005). 93 percent of the parental leave was used during the first two years. Of the total increase in the average number of parental leave days used by fathers of 15 days following the introduction of the first daddy month 7 days occurred after the child turned two.

observe and half of it later will take 15 days of parental leave if the child is born before the introduction of the second daddy month and 30 days if the child is born afterwards. A father taking all of the reserved parental leave during the reserved period would increase his number of parental leave days from 30 to 60 as a result of the reform.

During the first 17 or 24 months of the life of the child, we expect an increase in the number of fathers taking more than one month, but not more than two months, of parental leave. We expect an outflow from the group of fathers taking about one month of parental leave to the group taking between one and two months of parental leave. However, there is a possible inflow from the group of fathers taking zero days of parental leave to the group of fathers taking a positive number of parental leave days, but less than one month, during the first 17 or 24 months of the life of the child.

4. Data

There are two data sets available for this study. The first data set contains register data from the Swedish National Social Insurance Board over all use of parental leave in Sweden from 1993 to June 2003. In this paper I use the subset of data for parents of children born two weeks before and two weeks after the introduction of the second daddy month.

I compare before and after cohorts (also called control and treatment cohorts) to obtain estimates of the effects of the reform. The reform affects parents of children born after January 1, 2002. Parents of children born before constitute a control group. Since the timing of a birth is random we can use a natural experiment approach, comparing before (control) and after (treatment) groups.

The data cover paid parental leave. Parents who are not entitled to benefits related to previous earnings get a minimum amount of 150 SEK (about USD 20) per day. Thus all parents who do not work due to parental leave have an economic incentive to take at least some parental leave benefits. If a parent does not use any benefits he or she will not show up in the data. Almost all mothers have to be absent from work for at least a short period of time in connection with birth. If we identify only one parent, we know that the other parent took no parental leave, but we do not know the age or income of that parent.

We would not capture all effects of the introduction of the second daddy month if the share of couples showing up in the data is affected by the reform. However there is no reason for this to be the case. The incentives to report parental leave to the National Board of Social Insurance are unchanged. The introduction of the second daddy month coincided with an increase of total paid parental leave by one month. However, the constraint on total time for parental leave was not binding for the group taking no paid parental leave before the reform. So a loosening on this constraint should not affect parents' decision to report parental leave.

In Table 1 we see that there are 2914 children in the before cohort and 3375 in the after cohort. The larger number of children in the after cohort is in line with the seasonal pattern of births in Sweden. Almost all mothers of children in the data, about 97 percent, take at least some parental leave during the first 17 months of the life of the child.

[TABLE 1 ABOUT HERE]

The share of fathers who take at least some parental leave is about 80 percent. Most fathers use the 10 days of paid leave that fathers are entitled to in connection with the birth of a child. This explains why we see many fathers in the data who do not take any ordinary parental leave during the first 17 months of the life of the child.

The data available ends in June 2003, 18 months after the introduction of the reform. The youngest children in the after cohort are born on January 14, 2002. The longest possible observation period is therefore 17 months and 16 days. Some parental leave is reported after it is taken. Most of this late reporting occurs soon after the parental leave period. To avoid bias from underreporting of parental leave the observation period is shortened to 17 months after the birth of the child. I have experimented with shortening the period further, to avoid bias from the reporting that are more than 16 days late, but this do not affect the results. For the before and after groups to be comparable, all parental leave must be must be observed for the same length of time, regardless of the birth date of the child. Therefore, all parental leave taken within exactly 17 months from the birth of the child are included in the data.

A second data set contains data for parents of children in the Swedish Level-of-Living Survey. These data contains a representative sample of 0.1 percent of the Swedish population, or

about 200 children per year. The advantage of the second data set is that it covers a longer period of time, the data ends in March 2005, compared to June 2003.

Due to the much smaller number of observations, the before and after cohorts must include parents of children born a longer time before and after the reform. The before cohort covers all children in the Level-of-Living Survey born in 2001 (n=224) and the after cohort all children born in 2002 (n=225). Parental leave is observed for exactly two years after the child is born, for all children. To study the effects of the second daddy month during the two first years is of special interest, since most of the effects of the introduction of the first daddy month took place during the first two years of the life of the child.

5. A natural experiment

The results in this paper are obtained by comparing the use of parental leave for parents of children born before and after the introduction of the second daddy month. The timing of birth is a random event. The date of conception cannot be completely controlled by the parents. The duration of a pregnancy is normally distributed with a mean of 40 weeks and a standard deviation of two weeks. A birth can not be postponed. In principle, a birth can be triggered. However, given the design of the reform there is no reason to trigger birth. Parents of children born after the reform have one more month of parental leave.

For the first data set, containing data for all children born two week before and two weeks after the reform, we have a so called 'natural' natural experiment (see Rosenzweig and Wolpin, 2000). In such an experiment nature randomly assign the control and treatment groups.

To ensure that there really are no systematic difference between the before (control) and after (treatment) groups, we compare the age of the parents for the two groups. As can be seen in Table 2, the age of the mothers and the fathers are virtually the same in the before and after groups.

[TABLE 2 ABOUT HERE]

Most variables that affect the behaviour of parents are correlated with age. For example are age and level of education, which is known to affect the use of parental leave⁴, positively correlated with the age of the parents.

The second data set contains parents of children born in 2001 (before the reform) and in 2002 (after the reform). The experiment is not as clean for these data. The difference in date of birth for the children is on average one year for the before and after groups, compared to only two weeks for the before and after groups in the first data set. Some factors that affect parental leave, such as norms in society and labour market condition may change over the course of a year. Regarding labour market conditions, unemployment has been rather stable during the period studied. To my knowledge there are no good measures over changes in norms in society for the period studied.

An increase of parental leave used by the fathers in the second data set could in principle be explained by other factor than the second daddy month. One alternative that avoids this problem is to look at the number of fathers using about two months of parental leave before and after the reform. A general increase in fathers' use of parental leave after the reform could be explained by in increase in fathers' willingness to take parental leave during the period studied. However, it is unlikely that such an increase should be concentrated to only about two months of paternal parental leave, if the increase is not the result of the reform.

6. Results

This section contains results from two data sets.

6.1 Results from register data

There are data available on the whole population of children born before and after the reform for the first 17 months after the introduction of the first daddy month. The results are given in Table 3. The estimates of the effects of the reform are obtained simply by comparing the cohort of parents of children born before the reform, with the cohort of parents of children born after the reform.

⁴ See Sundström and Duvander (2002) and Ekberg et al (2005).

[TABLE 3 ABOUT HERE]

We see two significant effects; an increase in the number of days of parental leave used by the father in the income related 360-days system, but also an increase in the use of parental leave by mothers in this system. The increase by the fathers is expected since the second daddy month meant that one more month of parental leave is reserved for the father.

For the increase in the use of parental leave by fathers we do two sensitivity analysis. First, we know that there is considerable seasonal variation in the use of parental leave. Fathers use more parental leave during the summer months. The observation period is 17 months, and ends in June 2003. There is a two week difference in the average date of the birth of the child between the before and after group. Thus there is also an average difference of two weeks in the end date of the 17 month observation period. This may cause a seasonal difference. As an alternative to an observation period of 17 months, I have experimented with observing parental leave between February 2002 and June 2003 for the before and after cohorts. The results were almost identical to those obtained by using an observation period of 17 months after the birth of the child. Second, the results may be biased if there is a trend of increasing use of parental leave by the fathers around the time of the introduction of the reform. A time trend is unlikely to affect the results since the before and after cohorts are very close in time. I have nevertheless controlled for this possibility by introducing a linear trend variable. This is the standard method of controlling for linear trends in a natural experiment setting. The trend variable turned out to be insignificant and did not affect any of the results in this paper.

Table 4 shows the distribution of parental leave for fathers. The main finding is that the share of fathers taking between 30 and 70 days of parental leave increases by 6.1 percentage points. The share of fathers taking more than 70 days is virtually the same before and after the reform.

[TABLE 4 ABOUT HERE]

Returning to the increase in mean number of days of parental leave used by the mothers there are two explanations to this. For couples where the fathers would have used at least 60 days of parental leave regardless of the second daddy month, the reform simply meant an extension of parental leave by one month. Part of this increase in the number of days of parental leave should be allocated to the mother. Another possible explanation for the increase in the

parental leave days used by mothers is that mothers take their parental leave somewhat closer to the birth of the child. A common pattern of in the division of parental leave is that the father takes the last part of parental leave. Many parents end their parental leave when public day-care becomes available. After the reform some fathers may take the last two, instead of the single last month of parental leave. The mothers will then concentrate their paid parental leave to a shorter period. This may show up as an increase in mean number of days of parental leave taken by mothers during the first 17 months.

To sum up the effects of the introduction of the second daddy month, it increased the use of parental leave by fathers. The increase was obtained by a shift of fathers from the group taking less than 30 days of parental leave to the group taking between 30 and 70 days of parental leave. The reform also increased the use of parental leave by mothers. The results are in line with the predictions from Section 3.

6.2 Comparison with the effects of the first daddy month

Table 5 shows the effects of the introduction of the first daddy month on parental leave. The main difference between the first and the second daddy month is that the second daddy month coincided with an extension of total parental leave of one month, whereas the first daddy month simply reserved one month of parental leave for the fathers.

[TABLE 5 ABOUT HERE]

Looking at the effects of the first daddy month during the first 17 months it is striking that mothers use of the income related 360 days system decreased substantially, by 25.8 days. This effect is somewhat counteracted by an increase by 6 days in mothers use of the low flat-rate 90-days system. The increase in the first 17 months is somewhat larger for fathers after the introduction of the first daddy month than after the second. This difference is not statistically significant, however. In Section 3, it was predicted that effects of the second daddy month would be larger than for the first, if there either is a fixed cost for taking parental leave, or if the marginal utility of parental leave is increasing in total parental leave. If the marginal utility of parental leave is decreasing in total parental leave we would expect smaller effects of the second daddy month than for the first. Since the effects is (insignificantly) smaller of the second daddy month, we can conclude that fixed costs for taking parental leave is not

important for fathers and that the marginal utility of parental leave is not increasing in total parental leave.

Column 9-12 in Table 4 shows the full effect of the first daddy month during the eight years over which the parental leave may be distributed. For the mothers the effect takes place during the first 17 months after the child is born. For fathers a large increase occurs also between 17 months and eight years. Ekberg et al (2005) finds that 8 days of the increase of parental leave of the fathers after the introduction of the first daddy month took place during the first two years. After that the increase was about one day per year until the eight year when the increase was two days.

6.3 Results from the Level-of-Living data

Since most parental leave is taken used the first two years it is of special interest to study the effects during that period. This motivates the use of a second data set that covers this period, although it contains much fewer observations. Here we compare the use of parental leave for the fathers of children born in 2001 and 2002 during the first two years of the life of the child.⁵ The total use increase by 6 days, from 29.5 to 35.5.

[TABLE 6 ABOUT HERE]

Although higher than the increase during the first 17 months for the first data set, this increase is statistically insignificant. For the large data set that the group of fathers that used between 30 and 70 days of parental leave increased after the reform. Table 7 shows that this group increase sharply also for the first two years after the child is born. This 9.8 percentage points increase is significant on the one percent level.

[TABLE 7 ABOUT HERE]

The results from the Level-of-Living data reinforce the picture from the register data that the introduction of the second daddy month primarily affected fathers who used some parental leave, but not more than the reserved number of days.

⁵ There are some missing data for mothers in the 2002 sample, which makes comparisons for mothers between the 2001 and 2002 samples unreliable. The analysis is therefore restricted to the use of parental leave by fathers.

7. Conclusion

This paper has investigated the effects of the second daddy month on the use of parental leave in Sweden. Parents of children who are born after January 1, 2002 are affected by the reform, but not parents of children born before. This allows the use of a natural experiment approach when estimating the results of the reform. Two data sets have been used. The first data set contains register data over all parents to children born two weeks before and two weeks after the introduction of the second daddy month. The register data set covers all parental leave used by the parents the first 17 months after their child is born. The second data set contains only a subset of the population, but covers all parental leave for these parents during the first two years after the introduction of the second daddy month. For both data sets the results show that the introduction of the second daddy month lead to an increase in the use of parental leave by fathers during the periods studied. The mean increase in the use of parental leave by fathers was the result of a decrease in the number of fathers using one month or less and an increase in the number of fathers using about two months of parental leave.

The increase in parental leave of fathers after the introduction of the second daddy month is comparable in size to the increase which followed after the introduction of the first daddy month. Much of the increase in parental leave of fathers after the introduction of the first daddy month occurred when the child was relatively old. If the effects of the introduction of the second daddy month follow the same patter, there will be an increase in the use of parental leave by the fathers affected by the reform also in the years to come. It is of interest to note that among the intentions of introducing the first and the second daddy month was to affect the distribution of responsibility for housework and child care. This effect is unlikely to appear as a result of parental leave for children that are comparatively old.

The results of the two daddy month reforms appear similar regarding the use of parental leave by fathers. This is not the case for mothers. The first 17 months after the introduction of the first daddy month, the mean use of parental leave by mothers decreased by 26 days. After the introduction of the second daddy month, the use of parental leave by mothers increased by 5 days. A decrease in the average use of parental leave by mothers was expected after the introduction of the first daddy month, since the reform meant that mothers could not take all parental leave, which a majority of the mothers had done before the reform. In some families the fathers took two months or more of parental leave before the introduction of the second daddy month. For these families the introduction of the second daddy month, which coincided with an extension of total paid parental leave by one month, meant that the parents had one more month of parental leave, which they could divide between the themselves. Some of this extra time should go to the mothers, which can explain why the number of parental leave days used by mothers increased when the second daddy month was introduced.

The introduction of the second daddy month coincided with an increase of total parental leave available for the parent by one month. The first daddy month was introduced as a restriction of how to divide the existing twelve months of available parental leave. The point estimate of the increase in use of parental leave by fathers is somewhat lower for the second daddy month, 3.4 compared to 4.9 days. This difference is not statistically significant, however. In Section 3, it was predicted that effects of the second daddy month would be larger than for the first, if there either is a fixed cost for taking parental leave, or if the marginal utility of parental leave is decreasing in total parental leave. If the marginal utility of parental leave is decreasing in total parental leave we would expect smaller effects of the second daddy month, we can conclude that fixed costs for taking parental leave is not important for fathers and that the marginal utility of parental leave is not increasing in total parental leave is not important for fathers and that the marginal utility of parental leave is not increasing in total parental leave is not increasing in total parental leave.

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| | Number of children | Observed mothers | Observed fathers |
|--------|--------------------|------------------|------------------|
| Before | 2914 | 2830 | 2307 |
| After | 3375 | 3287 | 2745 |

Table 1. Number of observations for the register data in the before and after cohorts.

| | Mean age of father | Mean age of mother |
|--------|--------------------|--------------------|
| Before | 33.05 | 30.40 |
| | (5.62) | (5.15) |
| After | 33.07 | 30.40 |
| | (5.80) | (5.15) |

Table 2. Age in years for the register data. (Standard deviations in parenthesis.)

Standard deviations in parenthesis. The values for mothers are not a misprint. On the two digit level they appear exactly the same before and after the reform

| | Before | After | Differ- | t-value |
|------------------------|-------------------|-------------------|---------|---------|
| | | | ence | |
| Fathers 360- days | 31,06 (52,12) | 34,50 (53,08) | 3,44 | 2,59 |
| Fathers 90- days | 2,37 (9,37) | 2,53 (9,68) | 0,16 | 0,64 |
| Mothers 360- days | 258,88 (84,69) | 263,99 (83,93) | 5,11 | 2,40 |
| Mothers 90-days | 26,87 (29,87) | 26,71 (29,71) | -0,16 | -0,22 |
| Number of observations | 3375 | 2914 | | |

Table 3. Mean number of parental leave days for the register data. (Standard deviations in parenthesis.)

Standard deviations in parenthesis.

| | 17 months second daddy month | | | 17 months first daddy month | | |
|----------------|------------------------------|-------|------------|-----------------------------|-------|------------|
| Number of days | Before | After | Difference | Before | After | Difference |
| 0 days | 44.3 | 40.1 | -4.1 | 61,6 | 38,8 | -22,8 |
| 0.1 - 10 | 9.0 | 8.8 | -0.2 | 8,8 | 10,3 | 1,5 |
| 10 - 20 | 8.6 | 8.1 | -0.6 | 4,8 | 8,5 | 3,7 |
| 20 - 30 | 8.9 | 7.6 | -1.3 | 4,5 | 18,8 | 14,3 |
| 30 - 40 | 5.1 | 5.5 | 0.4 | 3,3 | 7,2 | 3,9 |
| 40 - 50 | 3.4 | 5.1 | 1.7 | 2,4 | 2,4 | 0,0 |
| 50 - 60 | 2.5 | 5.7 | 3.2 | 1,8 | 1,6 | -0,2 |
| 60 - 70 | 2.3 | 3.1 | 0.8 | 1,8 | 1,7 | -0,1 |
| 70 - 80 | 2.1 | 1.9 | -0.1 | 1,3 | 1,3 | 0,0 |
| 80 - 90 | 2.1 | 2.2 | 0.1 | 1,0 | 1,3 | 0,3 |
| 90 - 100 | 2.0 | 1.8 | -0.2 | 1,2 | 1,0 | -0,2 |
| > 100 | 9.7 | 10.0 | 0.3 | 7,3 | 7,1 | -0,2 |

Table 4. Distribution of fathers parental leave before and after the intro-
duction of the first and second daddy-month in percentage points
for the register data.

| | Second daddy month, 17 months | | | First daddy month, 17 months | | | First daddy month, 8 years | | | | | |
|------------------------|----------------------------------|-------------------|-----------------|---------------------------------|-------------------|-------------------|----------------------------------|---------|-----------------|-----------------|-----------------|---------|
| | Before | After | Differ- ence | t-value | Before | After | Differ- ence | t-value | Before | After | Differ- ence | t-value |
| Fathers 360- days | 31,06 (52,12) | 34,50 (53,08) | 3,44 | 2,59 | 22,76 (51,69) | 27,68 (47,88) | 4,92 | 4,26 | 29,5 (61,9) | 44,2 (57,4) | 14,7 | 10,8 |
| Fathers 90- days | 2,37 (9,37) | 2,53 (9,68) | 0,16 | 0,64 | 1,87 (9,38) | 2,09 (10,00) | 0,22 | 0,95 | 8,0 (21,1) | 9,3 (21,8) | 1,4 | 2,8 |
| Mothers 360- days | 258,88 (84,69) | 263,99 (83,93) | 5,11 | 2,40 | 311,39 (87,06) | 285,59 (80,76) | -25,79 | 13,22 | 323,7 (87,3) | 298,9 (80,5) | -24,7 | 12,8 |
| Mothers 90-days | 26,87 (29,87) | 26,71 (29,71) | -0,16 | -0,22 | 30,82 (38,27) | 36,88 (41,92) | 6,05 | 6,48 | 59,9 (42,8) | 63,1 (44,0) | 4,4 | 12,1 |
| Number of observations | 3375 | 2914 | | | 3782 | 3622 | | | 3892 | 3709 | | |

 Table 5. Mean number of parental leave days for the first and second daddy-month reform. (Standard deviations in parenthesis.)

| | Children born | Children born | Difference | t-value |
|------------------|---------------|---------------|------------|---------|
| | in 2001 | in 2002 | | |
| Fathers 360-days | 29.52 | 35.52 | 6.00 | 1.29 |
| - | (48.34) | (50.12) | | |
| Number of | 225 | 224 | | |
| observations | | | | |

Table 6. Mean number of parental leave days for the Level-of-Living data set.

Standard deviations in parenthesis.

| Number of days of parental leave | Fathers of children born in 2001 | Fathers of children born in 2002 | Difference |
|----------------------------------|-------------------------------------|-------------------------------------|------------|
| 0 | 42.7 | 42.0 | -0.7 |
| 0-30 | 31.1 | 20.1 | -11.0 |
| 30-70 | 11.1 | 21.0 | 9.9 |
| >70 | 15.1 | 17.0 | 1.8 |
| Nobs | 225 | 224 | |

Table 7. Distribution of fathers' parental leave before and after the introductionof the first and second daddy-month in percentage points for the Level-of-Living data.